

AN IMPROVED PHOTO IDENTIFICATION COLLECTION ASSEMBLY

1 BACKGROUND OF THE INVENTION2 Field of the Invention

3 An improved photo identification collection assembly
4 incorporating a plurality of image collectors structured to
5 simultaneously collect data associated with a specific
6 transaction. The assembly includes an image actuator structured
7 to generate an actuator signal, the actuator signal causing each
8 of the plurality of image collectors to simultaneously collect
9 data, thus providing a verifiable and authenticatable
10 correlation between various elements associated with a specific
11 transaction. The assembly further includes a data storage unit
12 structured to retrieve and at least temporarily store the data
13 from the image collectors for access by one or more viewing
14 devices, thus making the assembly substantially portable and
15 versatile.

16
17 DESCRIPTION OF THE RELATED ART

18 Since the time when businesses began accepting documents
19 such as checks as payment for goods and/or services rendered
20 and/or as verification of a transaction as in the case of
21 transportation tickets, there have been those who have taken
22 advantage of this practice for their own ill-gotten gains.
23 Specifically, document fraud, such as check fraud, began, and to

1 this day it continues to have a serious negative impact on the
2 bottom line of numerous businesses throughout the world, as
3 goods are provided to and/or services are rendered for a person
4 or persons who, in return, present the provider with a check or
5 other document that has been fraudulently generated. This may
6 be due to, among other reasons, insufficient funds in the
7 account, use of a lost or stolen check for which a stop payment
8 request has been issued, or a forged and/or counterfeit check.
9 While the law provides a business, as well as individuals, with
10 recourse against persons who commit such document fraud, the
11 process is costly and time consuming. As such, in many cases
12 businesses simply cannot justify the time or expense required to
13 bring the guilty parties to justice and to try to recover their
14 economic losses.

15 In addition to check fraud, along with the significant
16 increase in the acceptance of credit cards, and more recently
17 debit cards, by numerous businesses throughout the world, the
18 reported instances of credit card fraud have also significantly
19 increased. As is the case with check fraud, while a business
20 harmed by such an act has recourse to the law, it is often time
21 and/or cost prohibitive to enforce and, therefore, credit card
22 fraud has become an even more attractive scheme to the people
23 who perpetrate such crimes.

24 Initial attempts to address the problems associated with
25 check and credit card fraud included a common tactic, employed

1 by many businesses, which is to require that a customer, who is
2 otherwise unknown to them, produce some form of photo
3 identification, and in many cases, some form of government
4 issued photo identification, to verify that the name on the
5 check or credit card corresponds to the name on the photo
6 identification, and that the photo appears to be of the person
7 presenting it. Additionally, in many instances, at least some
8 of the relevant information contained on the photo
9 identification, such as a driver's license or telephone number,
10 may be written directly on the check or credit card transaction
11 slip. However, as these techniques began to be employed, the
12 people committing these fraudulent acts simply produced
13 fraudulent photo identification cards to accompany the checks
14 and/or credit cards they improperly, and illegally, presented as
15 payment.

16 A further measure implemented by a number of businesses,
17 initially and primarily in banking institutions, is the
18 utilization of some form of photo collection device or devices
19 strategically located in a facility, such as closed circuit
20 television cameras. While these are often effective to prove
21 that a certain person was in a certain place at a certain time,
22 they generally are not designed to capture the person's
23 activities in detail, such as the signing of a specific check or
24 a specific credit card receipt. Without concrete proof of unity
25 of a person and a fraudulent instrument, such as a check or

1 credit card receipt, insurance carriers, with whom many
2 businesses contract with to insure against loss due to fraud,
3 are not willing to compensate the victim business for many
4 losses. A main reason for this is that the closed circuit images
5 do not provide sufficient proof for the insurance carriers to
6 recover their losses via subsequent legal action.

7 A modification of this concept, specifically intended to
8 address the issue of check and credit card fraud, is the use of
9 a conventional camera to take a person's picture at the time
10 they make a purchase with a check or credit card. This system
11 presents several problems, the first being simply the expense of
12 taking a photograph of every person wishing to make a purchase
13 by check or credit card. In addition, as noted above, the
14 simple fact that a photograph of the person is taken at the time
15 of a transaction does not provide sufficient unity of the person
16 and the fraudulent instrument to allow the business owner, or
17 their insurance carrier, to effectively proceed with legal
18 action against the person(s) who committed the fraudulent act.

19 More recently, identification concerns have dramatically
20 risen with respect to national security and/or safety measures.
21 This is due in part to the apparent use of fraudulent
22 identification documents and associated airline tickets by
23 terrorists and other criminals. In addition to the nation's
24 airports, the government has indicated the need to strictly
25 monitor persons entering other sensitive facilities throughout

1 the nation, such as federally owned buildings and landmarks,
2 federal, state and local courthouses, prisons, power generating
3 plants, chemical processing facilities, etc. While a variety of
4 methods and devices exist for monitoring persons entering, and
5 in some instances, exiting, such facilities, none has provided
6 an effective and efficient means to maintain an accurate record,
7 such as by capturing a person's photograph, while at the same
8 time recording an image of the identification and/or other
9 documents which they presented to gain access to such
10 facilities.

11 As such, it would be highly beneficial to provide an
12 efficient and cost effective assembly to record a person's
13 financial transactions and/or their entry and exit from
14 sensitive facilities. In particular, it would be helpful to
15 provide an assembly which could record the image of the person
16 completing the transaction or entering a facility, as well as
17 the executed monetary instrument, airline or other
18 transportation ticket, and/or other relevant documentation, such
19 as some form of photo identification, simultaneously. Further,
20 it would be preferable if such an assembly were self contained
21 and portable such that it could easily and effectively be staged
22 and utilized at any location deemed to require such monitoring.
23 Also, it would be beneficial for such an assembly to be capable
24 of storing a large volume of the images it collects, such that
25 they are accessible for review via one or more viewing devices,

1 either though a local connection to the assembly, or by remotely
2 accessing the assembly via a network connection. Furthermore,
3 such an assembly should be durable, affordable, and low
4 maintenance so it provides an opportunity for anyone requiring
5 such an assembly to make avail of its full potential for
6 deterring the aforementioned unsavory activities, and should be
7 capable of effective connection and/or communication with other
8 remote or local facilities for subsequent and/or contemporaneous
9 verifications and authentication.

10 11 SUMMARY OF THE INVENTION

12 As previously noted, the present invention relates to an
13 improved photo identification collection assembly. This
14 improved assembly includes a base portion having a support
15 member structured to engage the base portion. In addition, the
16 base portion includes a stage operatively associated therewith,
17 such as for the placement of documents and the like. The stage
18 may include at least a primary alignment indicator which at
19 least partially defines a primary stage portion. In at least
20 one embodiment of the present invention, the stage may also
21 include a secondary alignment indicator which at least partially
22 defines a secondary stage portion, as discussed in greater
23 detail below.

24 An image collection assembly is provided which includes at
25 least a first image collector and a second image collector.

1 Each of the first and second image collectors include a
2 corresponding first and second lens. Moreover, in at least one
3 embodiment of the present invention, the image collection
4 assembly further includes a third image collector, having a
5 corresponding third lens. Each image collector is disposed in
6 engaging relation with the support member. More specifically,
7 each image collector engages the support member such that the
8 first image collector is disposed to at least focus on an object
9 positioned inside of the primary stage area, the second image
10 collector is disposed to at least focus on an object positioned
11 inside of the secondary stage area, and the third image
12 collector is disposed to at least focus on an object positioned
13 outside of the primary and secondary stage areas.

14 The present invention further comprises an image actuator,
15 wherein the image actuator is communicatively associated with at
16 least the first and second image collectors. In at least one
17 embodiment, the image actuator is structured to generate an
18 actuator signal, and to communicate the actuator signal to the
19 image collectors. Further, the actuator signal causes the image
20 collectors to simultaneously collect data.

21 Finally, the assembly of the present invention includes a
22 data storage unit disposed in cooperative association with at
23 least the first and second image collectors. The data storage
24 unit is structured to receive and at least temporarily store
25 data from the image collectors. Additionally, the data storage

1 unit includes a data transfer mechanism which is structured to
2 provide access to and retrieval of the data received from the
3 image collectors by one or more viewing devices.

4 These and other objects, features and advantages of the
5 present invention will become more clear when the drawings as
6 well as the detailed description are taken into consideration.

7 8 BRIEF DESCRIPTION OF THE DRAWINGS

9 For a fuller understanding of the nature of the present
10 invention, reference should be had to the following detailed
11 description taken in connection with the accompanying drawings
12 in which:

13 Figure 1 is a side view of one preferred embodiment of the
14 present invention.

15 Figure 2 is a partial cross sectional view of an image
16 collection assembly of the embodiment of Figure 1 along line 2-2
17 thereof.

18 Figure 3 is a rear view of the embodiment of Figure 1 along
19 line 3-3 thereof.

20 Figure 4 is 4 is a of the embodiment of Figure 1
21 along line 4-4 thereof.

22 Figure 5 is a plan view of a stage of the embodiment of
23 Figure 1 along line 5-5 thereof.

24 Figure 6 is a schematic representation of one embodiment of
25 the present invention.

1 Like reference numerals refer to like parts throughout the
2 several views of the drawings.

3
4 DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

5 The present invention is directed to an improved photo
6 identification collection assembly, generally shown as 10
7 throughout the Figures. The assembly 10 includes a base portion
8 12, which includes a stage, generally shown as 30. The stage 30
9 includes a primary alignment indicator 32, which at least
10 partially defines a primary stage area 34. Further, in at least
11 one embodiment, the stage 30 also includes a secondary alignment
12 indicator 36, which at least partially defines a secondary stage
13 area 38, as illustrated in Figure 5. The primary and secondary
14 alignment indicators 32 and 36 are disposed on the stage 30 by
15 any one of a number of marking techniques, including, but not
16 limited to, etching, painting, taping, overlaying, etc.

17 A support member 14 is provided which is structured to
18 engage the base portion 12. In at least one embodiment, the
19 support member 14 is attached to the base portion 12 in an
20 outwardly extending relation. More specifically, the support
21 member 14 is attached to the base portion 12 such that at least
22 a portion of the support member 14 is extending outward from the
23 stage 30, as illustrated in Figure 1, thereby at least partially
24 defining the outwardly extending relation.

25 A preferred embodiment of the present invention

1 incorporates an image collection assembly, generally shown as 20
2 in the Figures. The image collector assembly 20 includes at
3 least a first image collector 22 and a second image collector
4 24. Each of the first and second image collectors 22 and 24
5 have a corresponding first lens 23 and second lens 25. In at
6 least one preferred embodiment, the image collection assembly 20
7 further includes a third image collector 26 having a
8 corresponding third lens 27, however, it is understood that an
9 apparatus may encompass additional image collectors and still
10 fall within the scope and intent of the present invention. The
11 image collectors 22, 24, and 26 incorporated into the present
12 invention include any device utilized to capture a photographic
13 image of a person or an image of a document which can store the
14 image as a retrievable data file. These include, by way of
15 example only, digital cameras, which includes both still
16 photographic cameras and digital video recorders, or closed
17 circuit television cameras, which comprise both analog and
18 digital systems, among others. In addition, a preferred
19 embodiment of the present invention incorporates image
20 collectors 22, 24, and 26 which include the capacity to
21 associate a date and time stamp with each image collection
22 occurrence. As these types of devices have become increasingly
23 more affordable and reliable, the resultant assembly 10 of the
24 present invention is also, necessarily, affordable and reliable.

25 In at least one embodiment of the present invention, the

1 first, second, and third image collectors 22, 24, and 26 are
2 disposed in an engaging relation with the support member 14. A
3 preferred embodiment includes the first, second, and third image
4 collectors 22, 24, and 26 engaging the support member 14 such
5 that each of the image collectors 22, 24, and 26 are supported
6 and maintained in a spaced apart orientation. In this preferred
7 embodiment, the image collectors 22, 24, and 26 are spatially
8 positioned, as illustrated in Figure 6, such that first lens 23,
9 of the first image collector 22, is disposed to at least focus
10 on an object positioned inside of the primary stage area 34, and
11 the second lens 25, of the second image collector 24, is
12 disposed to at least focus on an object positioned inside of the
13 secondary stage area 38. Figure 6 further illustrates that in
14 this preferred embodiment, the third lens 27, of the third image
15 collector 26, is disposed to at least focus on an object
16 positioned outside of the primary stage area 34 and the
17 secondary stage area 38. In this preferred embodiment, it is
18 possible to record the image of the person completing a
19 transaction or entering a facility, while simultaneously
20 recording the image of document presented by that person at the
21 time of the event. Further, as previously indicated, the image
22 collectors 22, 24, and 26 of the present invention include the
23 capacity to associate a time and date stamp with the images
24 collected, thereby providing proof of unity of the person and
25 the documentation produced.

1 The present invention also incorporates an image actuator
2 28 which communicatively associates with at least the first
3 image collector 22 and the second image collector 24. The image
4 actuator 28 is structured to generate an actuator signal
5 including, but is not limited to, mechanical, electrical,
6 optical, or microwave signal modes. Additionally, the image
7 actuator 28 is structured to communicate the actuator signal to
8 at least the first and second image collectors 22 and 24 thereby
9 causing the first and second image collectors 22 and 24 to
10 simultaneously collect data. In a preferred embodiment, the
11 image actuator 28 is structured to communicate the actuator
12 signal to the first, second, and third image collectors 22, 24,
13 and 26, thereby causing the first, second, and third image
14 collectors 22, 24, and 26 to simultaneously collect data.

15 The image actuator 28 communicates the actuator signal to
16 the image collectors 22, 24, and 26 by any one of a number of
17 methods, dependant in part on the mode of the signal generated.
18 For example, if the actuator signal is mechanical, then the
19 image actuator 28 communicates the signal to the image
20 collectors via a mechanical interconnection, such as, for
21 example, a standard camera lens shutter release cable.
22 Alternatively, if an electrical actuator signal is generated,
23 the image actuator 28 communicates the actuator signal to the
24 image collectors 22, 24, and 26 by way of a standard electrical
25 wire connection. In the event the image actuator 28 generates

1 a microwave actuator signal, the image actuator communicates
2 with the image collectors 22, 24, and 26 via a wireless
3 transmitter and receiver. As previously indicated, a number of
4 actuator signal modes are contemplated by the present invention
5 and, as such, a number of methods of communicating the actuator
6 signal to the image collectors 22, 24, and 26 are also
7 envisioned.

8 Another feature of the present invention is the
9 incorporation of a data storage unit 16, which is cooperatively
10 associated with at least the first and second image collectors
11 22 and 24 such that it can receive and at least temporarily
12 store the data collected by the image collectors 22 and 24. At
13 least one embodiment includes a data storage unit 16
14 cooperatively associated with the first, second, and third image
15 collectors 22, 24, and 26. The data collected by the image
16 collectors 22, 24, and 26 is received by the data storage unit
17 16 via, by way of example only, an electrical connection, a
18 fiberoptic connection, or a wireless receiver, depending on the
19 format of the data provided by the image collectors 22, 24, and
20 26. Other formats of data are envisioned to be utilized in the
21 present invention, and as such, other methods of receiving data
22 from the image collectors 22, 24, and 26 are also contemplated.

23 In a preferred embodiment, the data storage unit 16 is
24 capable of storing the data collected simultaneously by the
25 image collectors 22, 24, and 26 in either a single data file or

1 in separate, individual data files. The data storage unit 16
2 incorporates any one of a number of standard devices utilized
3 for the storage of large quantities of data, such as, by way of
4 example only, a standard computer hard drive, a writable or re-
5 writable compact disc drive, or a diskette or tape drive.
6 Incorporation of any of the above mentioned devices for the data
7 storage unit 16 allows the assembly 10 of the present invention
8 to at least temporarily store a large volume of the images and
9 data it collects. In a preferred embodiment, the data storage
10 unit 16 is capable of storing at least 1.5 million image files.

11 In addition to receiving and at least temporarily storing
12 data from the image collectors 22, 24, and 26, the data storage
13 unit 16 is further structured to provide access to and allow the
14 retrieval of the data it contains by way of a data transfer
15 mechanism 18. Similar to the receipt of data from the image
16 collectors 22, 24, and 26, the data transfer mechanism 18
17 transmits data by any one of a number of data transmission
18 mediums including, but not limited to, electrical transmission,
19 utilizing a standard computer data transfer port as illustrated
20 at 18a in Figures 1 and 5, fiberoptic transmission, or wireless
21 transmission, just to name a few. The data transfer mechanism
22 18 is further structured to permit access to and allow the
23 retrieval of data by a single viewing device, such as a personal
24 computer or a laptop computer. Alternatively, the data transfer
25 mechanism 18 may be configured to permit access to and allow the

1 retrieval of data by a plurality of viewing devices via, for
2 example, a network connection.

3 At least one embodiment of the present invention requires
4 a power source to operate. This may be provided by way of an
5 external power source such as, for example, a standard
6 electrical power source connected to the assembly 10 of the
7 present invention via a standard power supply input 40, as
8 illustrated in Figure 5. Alternatively, the assembly 10 may
9 incorporate an internal power supply 42, as illustrated in
10 Figure 6. The internal power supply 42 may be, by way of
11 example only, a standard, single use battery, a rechargeable
12 battery, or a solar powered photovoltaic cell. Either form of
13 supplying power to the assembly 10 of the present invention
14 allows the assembly 10 to be portable such that it is easily and
15 effectively staged and utilized at virtually any location.

16 Since many modifications, variations and changes in detail
17 can be made to the described preferred embodiment of the
18 invention, it is intended that all matters in the foregoing
19 description and shown in the accompanying drawings be
20 interpreted as illustrative and not in a limiting sense. Thus,
21 the scope of the invention should be determined by the appended
22 claims and their legal equivalents.

23 Now that the invention has been described,